Solution 19.1

IAS 17, paragraph 10 provides the following situations where the classification of a lease agreement is in question:

a) Does ownership of the building transfer to North Ltd by the end of the lease? No
   - No evidence of this is provided (assume no)

b) Does North Ltd have an option to purchase the building at a price expected to be lower than the fair value at the date the option became exercisable? No
   - No evidence of this is provided (assume no)

c) Is the lease term for the major part of the economic life of the building? No
   - The lease term is for 8 years whereas the useful life is 20 years.

d) At the inception of the lease, does the present value of the minimum lease payments amount to at least substantially all of the fair value of the leased building?
   - The total of the actual lease payments is only C372 000 (5 years x C5 000 x 12 months + 3 years x C2 000 x 12 months). The present value thereof would be even less. The present value of the actual lease payments would therefore not constitute 'substantially all of the fair value', being C1 000 000. No

e) Is the building of such a specialised nature that only North Ltd can use it without major modifications?
   - No evidence of this is provided (assume no) No

Since none of the criteria have been met, the risks and rewards associated with ownership have not passed from South Ltd to North Ltd.

The lease over the building should therefore be classified as an operating lease.

Solution 19.2

a) The lease in terms of the Framework

Definition of an asset

- A resource controlled by the entity
- As a result of past events
- From which future economic benefits are expected to flow to the entity

Discussion of the asset definition

- Citizen Limited has the exclusive right to use the asset for three years during which they can prevent others from using it. This constitutes control over the resource.
  The lease agreement provides legal rights over the equipment. This further enhances the control over the resource.
- The agreement was signed on 1 January 20X7 and since the year end is 31 December 20X7, this constitutes a past event.
- Citizen Limited will use the equipment to generate future economic benefits.

Definition of a liability

- A present obligation of the entity
- As a result of past events
- The settlement of which will result in an outflow of future economic benefits from the entity.

Discussion of the liability definition

- The signed agreement may not be cancelled and is legally binding and therefore an obligation is raised on the day it is signed. Since the 3-year agreement is signed on 1 January 20X7, the obligation still exists at 31 December 20X7.
- The agreement was signed on 1 January 20X7 and since the year end is 31 December 20X7, this constitutes a past event.
- The payment of the future instalments constitutes an outflow of economic benefits.

Conclusion:

The definition of an asset and liability are met and hence, had the International Financial Reporting Standard on leases (IAS 17) not existed, Citizen Limited would have had to base the accounting treatment of the lease on the definitions provided in the Framework, in which case an asset and a corresponding liability would have had to be recognised.

Solution 19.2 continued …

b) The lease in terms of the IAS 17

IAS 17 requires that the lessee (Citizen Limited) determine the classification of the lease as either a finance or operating lease using the following criteria:

a) Does ownership of the equipment transfer to Citizen Limited by the end of the lease? No
- The lease agreement stipulates that ownership remains with Bigbrother Limited at the end of the lease.

b) Does Citizen Limited have an option to purchase the equipment at a price expected to be lower than the fair value at the date the option became exercisable? No
- No evidence to this effect is provided.

c) Is the lease term for the major part of the economic life of the equipment? No
- The lease term is 3 years and the useful life of the asset is 10 years.

d) At the inception of the lease, does the present value of the minimum lease payments amount to at least substantially all of the fair value of the leased equipment?
- The future instalments total C1 500 000, the present value of which would obviously be lower. This does not represent a substantial portion of the fair value (cash cost) of C5 000 000. No

e) Is the equipment of such a specialised nature that only Citizen Limited can use it without major modifications? No
- No evidence to this effect is provided.

Conclusion:

None of the criteria are met and the lease should therefore be recognised as an operating lease (i.e. Citizen Limited will recognise neither an asset nor a liability).

Solution 19.3

a) Calculations

Year	**Lease Rentals**
20X7	54 720
20X8	67 260
20X9	29 640
	151 620
	/ 3
	50 540

The operating rental income that will therefore be recorded in each of the 3 years concerned will be C50 540 .

b) Journals

31 December 20X7	**Debit**	**Credit**
Dr. PPE: Cost	3 000	
Bank		3 000
Initial direct costs of operating lease		
Dr. Depreciation: PPE	1 000	
Cr PPE: Accumulated Depreciation: Initial direct cost		1 000
Depreciate separate component over lease term		

Comment: *The initial direct costs of a lessor in an operating lease agreement are capitalized to the leased asset as a separate component and separately depreciated over the lease term.*

Solution 19.4

a) Theory

IAS 17, paragraph 10 provides the following situations where the classification of a lease agreement is in question:

a) Does ownership of the office furniture transfer to Hello Ltd by the end of the lease? Yes
- The lease agreement stipulates that ownership transfers to Hello Ltd at the end of the lease.

b) Does Hello Ltd have an option to purchase the office furniture at a price expected to be lower than the fair value at the date the option became exercisable? No
- No evidence to this effect is provided.

c) Is the lease term for the major part of the economic life of the office furniture? Yes
- The lease term is 3 years and the useful life of the asset is also 3 years.

d) At the inception of the lease, does the present value of the minimum lease payments amount to at least substantially all of the fair value of the leased office furniture?
- The future instalments total C600 000 and the present value, calculated using the implicit rate of 10%, is C497 370. The fair value (cash cost) is also C497 370. Yes

e) Is the office furniture of such a specialised nature that only Hello Ltd can use it without major modifications? No
- No evidence to this effect is provided.

Since it is only necessary for one of these criteria to be met for it to be said that the risks and rewards of ownership have passed to the lessee, it is clear that ownership will effectively pass to Hello Ltd. The lease should, therefore, be classified as a finance lease.

b) Journal entries

	Debit	Credit
1/1/20X2		
Furniture: cost	497 370	
Liability: finance lease		497 370
Recognition of the asset leased and the lease liability		
31/12/20X2		
Finance charges	49 737	
Liability: finance lease	150 263	
Bank		200 000
Lease liability interest raised and the instalment paid		
31/12/20X2		
Depreciation	165 790	
Accumulated depreciation		165 790
Depreciation of the leased asset (497 370 – 0)/ 3 years		

Solution 19.5

a) Journal entries

	Debit	Credit
31/12/20X3		
Operating lease expense	15 000	
Accrual		15 000
Raising the lease expense and accrual (see W1)		
31/12/20X3		
Taxation expense (current)	274 500	
Current tax payable: normal tax		274 500
Raising the years current tax (W2)		
31/12/20X3		
Deferred tax	4 500	
Taxation expense		4 500
Raising a deferred tax asset (W3)		

b) Disclosure

MOON LTD
EXTRACTS FROM THE STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C
Profit before tax *(given)*		900 000
Taxation	4	(270 000)
Profit for the year		630 000
Other comprehensive income		0
Total comprehensive income		630 000

MOON LTD
EXTRACTS FROM THE STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 20X3

	Note	20X3 C
ASSETS		
Non-current assets		
Deferred tax		4 500
EQUITY AND LIABILITIES		
Current liabilities		
Expenses payable		15 000
Current tax payable		274 500

Solution 19.5 continued …

MOON LTD
EXTRACTS OF THE NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C

2. Accounting policies

2.1. Deferred tax

Deferred tax is provided using the balance sheet liability method, on all the temporary differences at the balance sheet date between the tax base of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax asset are recognized for all deductible temporary differences, carry forward of unused tax losses, to the extent that is probable that future taxable profit will be available against which the deductible temporary difference, unused tax losses and tax credits can be utilized.

Carrying amount of deferred tax asset is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that the related tax benefit will be realized. Deferred taxis calculated at the rates that are expected to apply to the period when differences reverse based on the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

3. Profit before tax

Profit before tax is stated after the following items:

Expenses

• Operating lease expense	15 000

4. Taxation

Normal Tax	270 000
• Current tax	274 500
• Deferred tax	(4 500)

21. Operating lease description

Moon Ltd has entered into an operating lease over a computer system. In accordance with the lease agreement, ownership of the machine remains with the lessor, and there is no option to renew.

Future minimum lease payments under non-cancellable operating leases

		Minimum Lease Payment
Due within 1 year	*(20X4: 30 000)*	30 000
Due between 1 and 5 years	*(20X5:30 000+20X6:30 000+20X7:0+20X8:10 000)*	70 000
Due later than 5 years	*(20X9: 10 000 + 20X10: 10 000)*	20 000
Total		120 000

Solution 19.5 continued . . .

Workings

Working 1: average lease rental

Year 20X3	0
Years 20X4 to 20X6 (30 000 x 3)	90 000
Year 20X7	0
Years 20X8 to 20X10 (10 000 x 3)	30 000
Total	120 000
Average (120 000 / 8 years)	15 000

Working 2: current normal tax calculation

	20X3
Accounting profit	900 000
Adjust for temporary differences:	
Operating lease rental accrued	15 000
Less lease payment	(0)
Taxable profit	915 000
Current tax (at 30%)	274 500

Working 3: deferred tax

Operating lease payable	**Carrying amount**	**Tax base**	**Temporary difference**	**Deferred taxation**	
Balances at 1/1/20X3:	0	0	0	0	
Movement				4 500	Dr DT Cr TE
Balances at 31/12/20X3:	(15 000)	0	15 000	4 500	Asset

Solution 19.6

DUX LTD
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 30 JUNE 20X5

3. Profit before tax	**20X5** **C**
Profit before tax is stated after the following items:	
• Operating lease expense (*see working 1)*	20 000
Analysed as follows:	
o Minimum operating lease payment	45 000
o Sub-lease income	(25 000)

Working 1

Average annual rental expense: (50 000 + 40 000) / 2 = 45 000
Average annual rental income: (20 000 + 30 000) / 2 = 25 000

Net average annual rental expense: 45 000 – 25 000 = 20 000

Solution 19.7

a) Journal entries

	Debit	Credit
1/1/20X3		
Motor vehicle: cost	700 000	
Liability: finance lease		700 000
Capitalisation of leased asset and raising of corresponding liability		
1/1/20X3		
Liability: finance lease	200 754	
Bank		200 754
First lease instalment (no interest yet accrued)		
31/12/20X3		
Finance charges	49 925	
Liability: finance lease		49 925
Finance charges accrued (700 000 – 200 754) x 10% or W1		
31/12/20X3		
Depreciation	175 000	
Motor vehicle: accumulated depreciation		175 000
Depreciation charged at 25% (700 000 – 0) / 4 years		
31/12/20X3		
Taxation expense (current)	277 251	
Current tax payable: normal		277 251
Raising the years current tax (W2)		
31/12/20X3		
Deferred tax	7 251	
Taxation expense		7 251
Raising a deferred tax asset (W3)		

Solution 19.7 continued . . .

b) Disclosure

TWEET LTD
EXTRACTS FROM THE STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C
Profit before finance charges *(work backwards)*		949 925
Finance charges	4	(49 925)
Profit before tax *(given)*	3	900 000
Taxation	5	(270 000)
Profit for the year		630 000
Other comprehensive income		0
Total comprehensive income		630 000

TWEET LTD
EXTRACTS FROM THE STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 20X3

	Note	20X3 C
ASSETS		
Non-current assets		
Property, plant and equipment	6	525 000
Deferred tax		7 251
EQUITY AND LIABILITIES		
Non-current liabilities		
Non-current portion of finance lease liability	23	348 417
Current liabilities		
Current portion of finance lease liability (see note below)	23	200 754
Current tax payable		277 251

Note: when the lease payments are due in advance, it means that they will be reducing the capital sum owing – in other words, none of the lease payment will be in lieu of interest owing. For this reason, the full amount of the instalment is considered to be the current portion of the liability.

Solution 19.7 continued

b) Disclosure continued …

TWEET LTD
EXTRACTS OF THE NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C

2 Accounting policies

2.1 Property, plant and equipment

Property, plant and equipment is depreciated on the straight line method to their respective residual values at the following rates:

Motor vehicles 25%

2.2 Leases

Assets acquired under a finance lease are capitalised and depreciated over their useful lives. A finance lease liability is raised at the inception of the lease, which is then reduced by the capital portion of each payment. The interest portion of the repayments is calculated using the interest rate implicit in the lease and is expensed in the statement of comprehensive income.

2.3 Deferred tax

Deferred tax is provided using the balance sheet liability method, on all the temporary differences at the balance sheet date between the tax base of assets and liabilities and their carrying amounts for financial reporting purposes.

Deferred tax asset are recognized for all deductible temporary differences, carry forward of unused tax losses, to the extent that is probable that future taxable profit will be available against which the deductible temporary difference, unused tax losses and tax credits can be utilized.

Carrying amount of deferred tax asset is reviewed at each balance sheet date and reduced to the extent that it is no longer probable that the related tax benefit will be realized. Deferred taxis calculated at the rates that are expected to apply to the period when differences reverse based on the tax rates and tax laws that have been enacted or substantively enacted by the balance sheet date.

3 Profit before tax

Profit before tax is stated after the following items:

Expenses	
Depreciation	
Motor vehicle	175 000

4 Finance costs

Finance costs include:	
Finance lease finance costs *(W1)*	49 925

5 Taxation

Normal Tax	270 000
Current tax *(W2)*	277 251
Deferred tax *(W3)*	(7 251)

Solution 19.7 continued . . .

b) Disclosure continued …

TWEET LTD
EXTRACTS OF THE NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C
6 Property, plant and equipment		
Motor Vehicles		
Net carrying amount: 1 January 20X3		0
Gross carrying amount: 1 January 20X3		0
Accumulated depreciation and impairment losses: 1 January 20X3		(0)
Additions:		
Capitalised lease asset		700 000
Depreciation		(175 000)
Net carrying amount: 31 December 20X3		525 000
Gross carrying amount: 31 December 20X3		700 000
Accumulated depreciation and impairment losses: 31 December 20X3		(175 000)

23 Non-current interest-bearing liabilities

Capitalised finance lease liability *(W1)*	549 171
Less: current portion *(549 171 – 348 417)*	(200 795)
Non-current portion *(W1)*	348 417

The liabilities bear interest at 10% per annum.
The liability involving a finance lease over a motor vehicle is repayable in 3 remaining equal, annual advance instalments of C200 754.

Reconciliation of future minimum lease payments to their present values (see calculations below)

	Minimum Lease Payment	**Finance Charges** (a)	**Present Value**
Due within 1 year	(b) 200 754	0	(c) 200 754
Due between 1 and 5 years	(d) 401 508	(e) 53 092	(f) 348 416
Due later than 5 years	-	-	-
Total	602 262	53 092	549 170

Calculations:
a) Balancing figures
b) Payment due on 1 January 20X4
c) Payment due beginning of the year, therefore no present valuing needed
d) Payment due on 1 January 20X5 and 1 January 20X6: 200 754 x 2 years = 401 508
e) 34 842 + 18 250 = 53 092
f) (200 754 x 0.909090) + (200 754 x 0.826446);
where 0.909090 = 1 / 1.1 and where 0.826446 = 0.90909/1.1

Solution 19.7 continued . . .

Working 1: Effective interest rate table

Date	10% Interest	Instalment	Liability balance
1/1/20X3			700 000
1/1/20X3		(200 754)	499 246
31/12/20X3	49 925		549 171
1/1/20X4		(200 754)	348 417
31/12/20X4	34 842		383 258
1/1/20X5		(200 754)	182 504
31/12/20X5	18 250		200 754
1/1/20X6		(200 754)	0
	103 017	(803 016)	

Working 2: current normal tax calculation

		20X3
Accounting profit		900 000
Adjust for temporary differences:		
• Depreciation	*(700 000 – 0) / 4 years*	175 000
• Finance charges	*(W1)*	49 925
• Lease payment	*(W1)*	(200 754)
Taxable profit		924 171
Current tax (at 30%)		277 251

Working 3: deferred tax

Finance leased asset	Carrying amount	Tax base	Temporary difference	Deferred taxation	
Balances at 1/1/20X3:	0	0	0	0	
Leased asset	0	0	0	0	
Lease liability	0	0	0	0	
Movement				7 251	Dr DT Cr TE
Balances at 31/12/20X3:	(24 171)	0	24 171	7 251	Asset
Leased asset (a)	525 000	0			
Lease liability (W1) (b)	(549 171)	0			

Calculations:

a) Carrying amount of asset at 31 December 20X3: 700 000 (cost) – 175 000 (accum. depreciation)

b) Carrying amount of liability at 31 December 20X3: W1

Solution 19.8

i) Journals

		Debit	Credit
2/4/20X2			
Vehicle: cost		124 343	
Liability: finance lease			124 343
Recognition of the asset leased and the lease liability (W1)			
31/3/20X3			
Finance charges	*124 343 x 10%*	12 434	
Liability: finance lease	*50 000 – 12 434*	37 566	
Bank			50 000
Lease liability interest raised and the instalment paid (W2)			
31/3/20X3			
Depreciation	*(124 343 – 0)/ 3 years*	41 448	
Vehicle: accumulated depreciation			41 448
Depreciation of the leased asset			

ii) Disclosure

QUACK LTD
EXTRACTS FROM THE STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 MARCH 20X3

	Note	20X3 C
Profit before finance charges *(work backwards: 300 000 + 12 434)*		312 434
Finance charges	2	(12 434)
Profit before tax *(given)*		300 000
Taxation	3	(90 000)
Profit for the year		210 000
Other comprehensive income		0
Total comprehensive income		210 000

QUACK LTD
EXTRACTS FROM THE STATEMENT OF FINANCIAL POSITION
AS AT 31 MARCH 20X3

	Note	20X3 C
ASSETS		
Non-current assets		
Property, plant and equipment	4	82 895
Deferred tax		1 165
EQUITY AND LIABILITIES		
Non-current liabilities		
Non-current portion: finance lease liability	5	45 455
Current liabilities		
Current portion: finance lease liability	5	41 322
Current tax payable		91 165

Solution 19.8 continued …

QUACK LTD
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 MARCH 20X3

		Note	20X3 C
2. Finance costs			
Finance costs include:			
• Finance lease costs			12 434
3. Taxation			
Normal Tax			90 000
• Current tax	*(see working 4)*		91 165
• Deferred tax	*(see working 3)*		(1 165)
4. Property, plant and equipment			
Net carrying amount: 1 April			0
Gross carrying amount: 1 April			*0*
Accumulated depreciation and impairment losses: 1 April			*0*
Additions:			
• Capitalised lease asset			124 343
Depreciation			(41 448)
Net carrying amount: 31 March			82 895
Gross carrying amount: 31 March			*124 343*
Accumulated depreciation and impairment losses: 31 March			*(41 448)*
5. Interest-bearing non-current liabilities			
Capitalised finance lease liability	*(balance at 31/3/20X3 per working 2)*		86 777
Less: current portion	*(balancing figure or also working 2)*		(41 322)
Non-current portion	*(balance at 31/3/20X4 per working 2)*		45 455

The liability bear interest at 10% per annum and is repayable in 2 remaining equal arrear instalments of C50 000, each payable on 31 March.

Reconciliation of future minimum lease payments to their present values: (See calculations below)

	Minimum Lease Payment	Finance Charges *(a)*	Present Value
Due within 1 year (20X1)	*(b)* 50 000	4 545	*(c)* 45 455
Due between 1 and 5 years (20X2)	*(d)* 50 000	8 678	*(e)* 41 322
Due later than 5 years	-	-	-
Total	100 000	13 223	86 777

Ownership of the company's finance leased delivery van passes to Quack Ltd upon expiry of the lease.

Calculations

a) Balancing figures
b) Amount to be paid in 20X4
c) 50 000 x 0.90909 = 45 455 (where PVF = 1 / 1.1 = 0.90909)
d) Amount to be paid in 20X5
e) 50 000 x 0.826446 = 41 322 (where PVF = 0.90909 / 1.1 = 0.826446

Solution 19.8 continued …

Workings

Working 1: Present value of the minimum lease payments

Present value of the minimum lease payments:
(50 000 x 0.90909) + (50 000 x 0.826446) + (50 000 x 0.751315) = 124 343
Where PVFs: 0.909 = 1 / 1.1 and 0.826446 = 0.90909/1.1 and 0.751315 = 0.826446/1.1

Working 2: Effective interest rate table

			Liability	
Date	**Finance charges: 10%**	**Instalment**	**Capital repaid**	**Balance**
1/4/20X2				124 343
31/3/20X3	12 434	(50 000)	37 566	86 777
31/3/20X4	8 678	(50 000)	41 322	45 455
31/3/20X5	4 545	(50 000)	45 455	-
	25 657	(150 000)	124 343	

Working 3: deferred normal tax

Finance leased asset	**Carrying amount**	**Tax base**	**Temporary difference**	**Deferred taxation**	
Balances at 1/4/20X2:	0	0	0	0	
Leased asset	0	0	0	0	
Lease liability	0	0	0	0	
Movement				1 165	Dr DT Cr TE
Balances at 31/3/20X3:	(3 882)	0	3 882	1 165	Asset
Leased asset (a)	82 895	0			
Lease liability (W2)	(86 777)	0			
Movement				37	Dr DT Cr TE
Balances at 31/3/20X4:	(4 008)	0	4 008	1 202	Asset
Leased asset (b)	41 447	0			
Lease liability (W2)	(45 455)	0			
Movement				(1 202)	Cr DT Dr TE
Balances at 31/3/20X5:	0	0	0	0	Asset
Leased asset (c)	0	0			
Lease liability (W2)	0	0			

a) Cost: 124 343 – Accumulated depreciation: (124 343 – 0) / 3 years x 1 year = 82 895
b) Cost: 124 343 – Accumulated depreciation: (124 343 – 0) / 3 years x 2 years = 41 447
c) Cost: 124 343 – Accumulated depreciation: ((124 343 – 0) / 3 years x 3 years = 0

Working 4: current normal tax

	20X3
Profit before tax/Accounting profit	300 000
Depreciation (124 343 /3 years)	41 448
Finance charges (W2)	12 434

Wear and tear (not granted because asset is leased)	-
Lease payment	(50 000)
Taxable profit	303 882
Current tax (at 30%)	91 165

Solution 19.9

a) SP>FV; compensating

	Debit	Credit
3/1/20X3		
Bank (given)	2 000 000	
Machine: cost (given)		1 200 000
Machine: accumulated depreciation (1 200K – 800K)	400 000	
Deferred profit (2 000K – 1 800K)		200 000
Profit on disposal (1 800K – 800K)		1 000 000
Sale of machine		
31/12/20X3		
Operating lease expense	300 000	
Bank		300 000
Payment of lease expense		
31/12/20X3		
Deferred profit	50 000	
Deferred profit amortised		50 000
Amortisation of deferred profit (200 000/ 4 year lease period)		

b) SP<FV; non-compensating

	Debit	Credit
3/1/20X3		
Bank (given)	1 500 000	
Machine: cost (given)		1 200 000
Machine: accumulated depreciation (1 200K – 800K)	400 000	
Profit on disposal (1 500K – 800K)		700 000
Sale of machine		
31/12/20X3		
Operating lease expense	200 000	
Bank		200 000
Payment of lease expense		

Solution 19.10

a) SP > FV with compensation (i.e. lease rentals are greater than market rentals)

SP
FV } **Deferred profit (always)**
CA } **Profit or loss**

		Debit	Credit
2 January 20X5			
Bank	*Given*	1 000 000	
Plant: cost	*Given*		500 000
Plant: accumulated depreciation	*Given*	100 000	
Deferred profit	*(1 000 000 – 750 000)*		250 000
Profit on disposal	*(750 000 – 400 000)*		350 000
Sale of plant			
31 December 20X5			
Operating lease expense		200 000	
Bank			200 000
Payment of lease expense			
Deferred profit		62 500	
Deferred profit amortised			62 500
Amortisation of deferred profit (250 000/ 4 year lease period)			

Solution 19.10 continued …

b) SP > FV with no compensation (i.e. lease rentals are not greater than market rentals)

SP
FV } **Deferred profit (always)**
CA } **Profit or loss**

		Debit	Credit
2 January 20X5			
Bank	*Given*	1 000 000	
Plant: cost	*Given*		500 000
Plant: accumulated depreciation	*Given*	100 000	
Deferred profit	*(1 000 000 – 750 000)*		250 000
Profit on disposal	*(750 000 – 400 000)*		350 000
Sale of plant			
31 December 20X5			
Operating lease expense		150 000	
Bank			150 000
Payment of lease expense			
Deferred profit		62 500	
Deferred profit amortised			62 500
Amortisation of deferred profit (250 000/ 4 year lease period)			

Notice that the journals are identical except for the amount paid by way of lease rentals. This is because where the selling price exceeds the fair value, the excess created is always recognised as a deferred profit and amortised over the period of the lease. This is the treatment whether the unusually high selling price is or is not compensated for by lease rentals that are greater than market value.

Solution 19.10 continued …

c) SP < FV with compensation (i.e. lease rentals are less than market rentals)

If lease rentals are reduced to compensate for low selling price:

Profit or loss recognised { **FV**, **SP** } **Loss deferred**; **CA**

		Debit	Credit
2 January 20X5			
Bank	*Given*	500 000	
Plant: cost	*Given*		500 000
Plant: accumulated depreciation	*Given*	100 000	
Deferred loss	*(750 000 – 500 000)*	250 000	
Profit on disposal	*(750 000 – 400 000)*		350 000
Sale of plant			
31 December 20X5			
Operating lease expense		75 000	
Bank			75 000
Payment of lease expense			
Deferred loss amortised		62 500	
Deferred loss			62 500
Amortisation of deferred loss (250 000/ 4 year lease period)			

Solution 19.10 continued …

d) SP < FV with no compensation (i.e. lease rentals are not less than market rentals)

If lease rentals are not reduced to compensate for low selling price:

FV

Profit or loss recognised { **SP**

CA

		Debit	Credit
2 January 20X5			
Bank	*Given*	500 000	
Plant: cost	*Given*		500 000
Plant: accumulated depreciation	*Given*	100 000	
Profit on disposal	*(500 000 – 400 000)*		100 000
Sale of plant			
31 December 20X5			
Operating lease expense		150 000	
Bank			150 000
Payment of lease expense			

Notice that where the low selling price is not compensated for by reduced lease rentals, the loss of 250 000 that was incurred by not selling the plant at its fair value (FV: 750 000 – SP: 500 000) is not deferred but is recognised in profit and loss immediately instead.
The profit on sale is therefore measured at 100 000 (SP: 500 000 – CA: 400 000).
Compare this to part (c) above where the profit on sale was measured at 350 000 using the fair value instead of the actual selling price (FV: 750 000 – CA: 400 000) with a deferred loss of 250 000 amortised back to profit and loss over the period of the lease.

Solution 19.11

a) Selling price and lease rentals equal to market prices

W1: Effective interest rate table Date	Interest 10%	Bank	Lease liability
2 January 20X5		500 000	(500 000)
31 December 20X5	50 000	(75 000)	475 000
31 December 20X6	47 500	(75 000)	447 500
31 December 20X7	44 750	(75 000)	417 250
31 December 20X8	41 725	(75 000)	383 975
		(383 975)	0
	183 975	(183 975)	

	Debit	Credit
2 January 20X5		
Bank (given)	500 000	
Plant: cost (given)		200 000
Plant: accumulated depreciation (given)	100 000	
Deferred profit (500 000 – 100 000)		400 000
Sale of plant under a finance lease		
Plant: cost (given)	500 000	
Finance lease liability		500 000
Purchase of plant under a finance lease		
31 December 20X5		
Depreciation	125 000	
Plant: accumulated depreciation		125 000
Depreciation of plant [(500 000 – 0) / 4 years]		
Deferred profit	100 000	
Deferred profit amortised		100 000
Amortisation of deferred profit (400 000 / 4 years)		
Finance costs *(W1)*	50 000	
Finance lease liability *(balancing)*	25 000	
Bank (given)		75 000
Payment of lease expense (see W1)		

Solution 19.11

b) Selling price and lease rentals lower than market prices

Date	Interest 10%	Bank	Lease liability
		400 000	400 000
2 January 20X5	40 000	(50 000)	390 000
31 December 20X5	39 000	(50 000)	379 000
31 December 20X6	37 900	(50 000)	366 900
31 December 20X7	36 690	(50 000)	353 590
31 December 20X8		(353 590)	0
	153 590	(153 590)	

		Debit	Credit
2 January 20X5			
Bank	*Given*	400 000	
Plant: cost	*Given*		200 000
Plant: accumulated depreciation	*Given*	100 000	
Deferred profit	*(400 000 – 100 000)*		300 000
Sale of plant under a finance lease			
Plant: cost	*Given*	400 000	
Finance lease liability			400 000
Purchase of plant under a finance lease			
31 December 20X5			
Depreciation	*(400 000 – 0) / 4 years*	100 000	
Plant: accumulated depreciation			100 000
Depreciation of plant			
Deferred profit	*(300 000 / 4 years)*	75 000	
Deferred profit amortised			75 000
Amortisation of deferred profit			
Finance costs	*W1*	40 000	
Finance lease liability	*Balancing*	10 000	
Bank	*Given*		50 000
Payment of lease expense (see W1)			

Notice that the principle remains the same as in part (a) – that is to say that the profit on 'sale' is always deferred and amortised in a sale and finance leaseback irrespective of whether the rentals are reduced or not to compensate for a selling price that is lower than market price.

Solution 19.12

a) Journal entries

	Debit	Credit
3/1/20X3		
Bank	1 200 000	
Building: accumulated depreciation (1 250 000 – 1 000 000)	250 000	
Building: cost		1 250 000
Deferred profit (SP 1 200 000 – CA 1 000 000)		200 000
Raising the sale and derecognising of building		
Building: cost	1 200 000	
Liability: finance lease		1 200 000
Capitalisation of leased asset and raising of corresponding liability		
31/12/20X3		
Finance charges	120 000	
Liability: finance lease	258 565	
Bank		378 565
Splitting of repayment into finance charges and liability reduction (see working 3)		
Depreciation	300 000	
Accumulated depreciation		300 000
Depreciation charged over 4 years (1 200 000 – 0) / 4 years		
Deferred profit	50 000	
Deferred profit amortised		50 000
Amortisation of deferred profit (SP 1 200 000 – CA 1 000 000) / 4yrs		
Taxation expense (current)	327 431	
Current tax payable: normal		327 431
Raising the years current tax (see working 2)		
Deferred tax	57 431	
Taxation expense		57 431
Raising a deferred tax asset (see workings 3)		

Solution 19.12 continued …

b) Disclosure

WOOF LTD
EXTRACTS FROM THE STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEAR ENDED 31 DECEMBER 20X3

	Note	20X3 C
Profit before finance charges (balance back to this figure)		1 020 000
Finance charges	4	(120 000)
Profit before tax *(given)*	3	900 000
Taxation	5	(270 000)
Profit for the year		630 000
Other comprehensive income		0
Total comprehensive income		630 000

WOOF LTD
EXTRACTS FROM THE STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 20X3

	Note	20X3 C
ASSETS		
Non-current assets		
Property, plant and equipment	22	900 000
Deferred tax *(W3)*		57 431
EQUITY AND LIABILITIES		
Non-current liabilities		
Non current portion of finance lease liability	23	657 014
Current liabilities		
Current portion of finance lease liability	23	284 421
Current tax payable*(W2)*		327 431

WOOF LTD
EXTRACTS OF THE NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X3

2. Accounting policies

2.1 Property, plant and equipment
Property, plant and equipment is depreciated on the straight line method to their respective residual values at the following rates:
Buildings 25%

2.2 Leases
Assets acquired under a finance lease are capitalised and depreciated over their useful lives. A finance lease liability is raised at the inception of the lease, which is then reduced by the capital portion of each payment. The interest portion of the repayments is calculated using the interest rate implicit and is expensed in the statement of comprehensive income.

2.3 Deferred tax
Deferred tax is raised on the balance sheet liability method

Solution 19.12 continued …

WOOF LTD
EXTRACTS OF THE NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X3

3. Profit before tax

Profit before tax is stated after the following items:

Expenses		
Depreciation		
• Building	*(1 200 000 – 0) / 4 years*	300 000
Incomes		
• Deferred profit amortised	*(SP 1 200 000 – CA 1 000 000) / 4yrs*	50 000

4. Finance costs

Finance costs include:

• Finance lease finance costs *(W1)*	120 000

5. Taxation

Normal Tax	270 000
• Current tax *(W2)*	327 431
• Deferred tax *(W3)*	(57 431)

22. Property, plant and equipment

Building	
Net carrying amount: 1 January 20X3	1 000 000
Gross carrying amount: 1 January 20X3	1 250 000
Accumulated depreciation and impairment losses: 1 January 20X3	(250 000)
Sale	(1 000 000)
Additions:	
• Capitalised lease asset	1 200 000
Depreciation	(300 000)
Net carrying amount: 31 December 20X3	900 000
Gross carrying amount: 31 December 20X3	1 200 000
Accumulated depreciation and impairment losses: 31 December 20X3	(300 000)

23. Non-current interest-bearing liabilities

Capitalised finance lease liability *(W1)*	941 435
Less: current portion *(941 435 – 657 014)*	(284 421)
Non-current portion *(W1)*	657 014

The liabilities bear interest at 10% per annum.
The liability involving a sale and finance leaseback over a building is repayable in 3 remaining equal, annual arrear instalments of 378 565.

Reconciliation of the future minimum lease payments to their present values

	Minimum Lease Payment	**Finance Charges (a)**	**Present Value**
Due within 1 year	(b) 378 565	34 415	(c) 344 150
Due between 1 and 5 years	(d) 757 130	159 845	(e) 597 285
Due later than 5 years	-	-	-
Total	1 135 695	194 260	941 435

Calculations:
a) Balancing figures
b) Payment due on 31/12/20X4: 378 565
c) Payment due on 31/12/20X4: 378 565/1.1
d) Payments due on 31/12/20X5 and 31/12/20X6: 378 565 x 2 years
e) Payments due on 31/12/20X5 and 31/12/20X6: (378 565/1.21) + (378 565/1.331)

Solution 19.12 continued …

Workings

Working 1: Effective interest rate table

			Liability	
Date	**10% Interest**	**Instalment**	**Capital repaid**	**Balance**
3/1/20X3				1 200 000
31/12/20X3	120 000	(378 565)	258 565	941 435
31/12/20X4	94 144	(378 565)	284 421	657 014
31/1/20X5	65 701	(378 565)	312 864	344 150
31/12/20X6	34 415	(378 565)	344 150	0
	314 260	(1 514 260)	1 200 000	

Working 2: Current normal tax calculation

		20X3
Accounting profit		900 000
Adjust for temporary differences:		
Finance charges	*W1*	120 000
Deferred profit amortised	*(SP 1 200 000 – CA 1 000 000) / 4yrs*	(50 000)
Depreciation	*(1 200 000 - 0)/ 4 years*	300 000
Wear and tear	*Not granted because asset sold*	0
Taxable capital gain	*(1 200 000 – TB: 1 000 000)*	200 000
Lease payment	*W1*	(378 565)
Taxable profit		1 091 435
Current tax (at 30%)		327 431

Working 3: deferred tax

Building under sale and leaseback	**Carrying amount**	**Tax base**	**Temporary difference**	**Deferred taxation**	
Balances at 1/1/20X3:	1 000 000	1 000 000	0	0	
Building	1 000 000	1 000 000	0	0	
Lease liability	0	0			
Deferred profit	0	0	0	0	
Movement				57 431	Dr DT Cr TE
Balances at 31/12/20X3:	(191 435)	0	191 435	57 431	Asset
Building (a)	900 000	0	0	0	
Lease liability (W1)	(941 435)	0			
Deferred profit (b)	(150 000)	0	0	0	

Calculations:
a) 1 200 000 – (1 200 000 – 0)/ 4 = 900 000
b) 200 000 – (200 000/4) = 150 000

Solution 19.13

	Debit	Credit
1 January 20X5		
Factory building: cost (PPE)	1 500 000	
Bank / Creditor		1 500 000
Purchase of factory building		
Investment property: cost	1 500 000	
Factory building: cost (PPE)		1 500 000
Change in intention: property to be leased therefore transferred to investment property		
31 December 20X5		
Depreciation	150 000	
Investment property: accumulated depreciation		150 000
Depreciation over its useful life (1 500 000 / 10)		
Bank	100 000	
Rent receivable	48 792	
Rent income		148 792
Rent due for the year		
31 December 20X6		
Depreciation	150 000	
Investment property: accumulated depreciation		150 000
Depreciation over its useful life (1 500 000 / 10)		
Bank	120 000	
Rent receivable	28 792	
Rent income		148 792
Rent due for the year		
31 December 20X7		
Depreciation	150 000	
Investment property: accumulated depreciation		150 000
Depreciation over its useful life (1 500 000 / 10)		
Bank	144 000	
Rent receivable	4 792	
Rent income		148 792
Rent due for the year		
31 December 20X8		
Depreciation	150 000	
Investment property: accumulated depreciation		150 000
Depreciation over its useful life (1 500 000 / 10)		
Bank	172 600	
Rent receivable		23 808
Rent income		148 792
Rent due for the year		
31 December 20X9		
Depreciation	150 000	
Investment property: accumulated depreciation		150 000
Depreciation over its useful life (1 500 000 / 10)		
Bank	207 360	
Rent receivable		58 586
Rent income		148 792
Rent due for the year		

Solution 19.13 continued …

W1 Annual lease charge

	Payment	Annual charge	Movement	Asset / (Liability)
31 December 20X5 *given*	100 000	148 792	48 792	48 792
31 December 20X6 *(100 000 x 1.2)*	120 000	148 792	28 792	77 584
31 December 20X7 *(120 000 x 1.2)*	144 000	148 792	4 792	82 376
31 December 20X8 *(144 000 x 1.2)*	172 600	148 792	(23 808)	58 568
31 December 20X9 *(1726000 x 1.2)*	207 360	148 792	(58 568)	0
	743 960	743 960		

The straight-lined annual rental charge: 148 792
(743 960 / 5)

Solution 19.14

a)

Journals		Debit	Credit
1/1/20X5			
Inventory		500 000	
Work in progress			500 000
Transfer of inventory after manufacture			
Cost of sale		500 000	
Inventory			500 000
Cost of machine sold under finance lease			
Finance lease debtors – gross investment	*200 000 x 5 years*	1 000 000	
Finance lease debtors – unearned finance income	*Balancing*		360 000
Sale	*500 000 x 128%*		640 000
Finance lease entered into, cash sales price of C320 000 and 5 years of arrear instalments of C100 000 each			
31/12/20X5			
Bank		200 000	
Finance lease debtors – gross investment			200 000
Instalment received under finance lease			
Finance lease debtors – unearned finance income		108 743	
Finance income			108 743
Interest income earned at 16.9911% , (effective interest rate table: W2)			
31/12/20X6			
Bank		200 000	
Finance lease debtors – gross investment			200 000
Instalment received under finance lease			
Finance lease debtors – unearned finance income		93 237	
Finance income			93 237
Interest income earned at 16.9911% , (effective interest rate table: W2)			
31/12/20X7			
Bank		200 000	
Finance lease debtors – gross investment			200 000
Instalment received under finance lease			
Finance lease debtors – unearned finance income		75 097	
Finance income			75 097
Interest income earned at 16.9911% , (effective interest rate table: W2)			
31/12/20X8			
Bank		200 000	
Finance lease debtors – gross investment			200 000
Instalment received under finance lease			
Finance lease debtors – unearned finance income		53 875	
Finance income			53 875
Interest income earned at 16.9911% , (effective interest rate table: W2)			
31/12/20X9			
Bank		200 000	
Finance lease debtors – gross investment			200 000
Instalment received under finance lease			
Finance lease debtors – unearned finance income		29 047	
Finance income			29 047
Interest income earned at 16.9911% , (effective interest rate table: W2)			

Solution 19.14 continued …

b)

APPLEBEE LIMITED
STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 20X9

	Notes	20X9 C	20X8 C
Non-current assets			
Lease debtors	52	0	0
Current assets			
Lease debtors	52	0	170 953

APPLEBEE LIMITED
NOTES TO THE FINANCIAL STATEMENTS
FOR THE YEAR ENDED 31 DECEMBER 20X9

52. Finance lease debtor	20X9 C	20X8 C
Gross investment in finance lease	0	200 000
Within 1 year	0	200 000
After 1 year but before 5 years	0	0
After 5 years	0	0
Unearned finance income	0	(29 047)
Present value of future minimum lease payments (capital):	0	170 953
Within 1 year	0	170 953
After 1 year but before 5 years	0	0
After 5 years	0	0

W1: Analysis of total amount receivable		C
Total future lease payments	200 000 x 5 years	1 000 000
Guaranteed residual value		0
Gross investment		1 000 000
Selling price (net investment)	(500 000 x 1.28)	640 000
Gross profit	640 000 – 500 000	140 000
Cost of asset	Given	500 000
Finance income	1 000 000 – 640 000	360 000

W2: Finance income measured using the effective interest rate method

Date	Instalment	Payment in lieu of: Interest	Payment in lieu of: Capital	Capital Balance
1 Jan X5				640 000
31 Dec X5	200 000	108 743	91 257	548 743
31 Dec X6	200 000	93 237	106 763	441 981
31 Dec X7	200 000	75 097	124 903	317 078
31 Dec X8	200 000	53 875	146 125	170 953
31 Dec X9	200 000	29 047	170 953	0
	1 000 000	360 000	640 000	

Solution 19.15

Journals	Debit	Credit
1/1/20X6		
Machine: cost	400 000	
Bank		400 000
Purchase of machine		
Finance lease debtors – gross investment	470 000	
Finance lease debtors – unearned finance income *(470 000 – 400 000)*		70 000
Machine: cost		400 000
Finance lease entered into over machine costing C400 000; total receivable: C470 000 (150 000 x 3 years + 20 000 residual value)		
Bank	150 000	
Finance lease debtors – gross investment		150 000
Finance lease instalment received		
31/12/20X6		
Finance lease debtors – unearned finance income	42 705	
Finance income		42 705
Interest income earned, (effective interest table, W2 per 1 Jan X7)		
Tax expense: normal tax	5 000	
Current tax payable: normal tax		5 000
Current tax charge (W6)		
Tax expense: normal tax	7 812	
Deferred tax: normal tax		7 812
Deferred tax adjustment (W5)		
1/1/20X7		
Bank	150 000	
Finance lease debtors – gross investment		150 000
Finance lease instalment received		
31/12/20X7		
Finance lease debtors – unearned finance income	24 377	
Finance income		24 377
Interest income earned, (effective interest table, W2 per 1 Jan X8)		
Tax expense: normal tax	5 000	
Current tax payable: normal tax		5 000
Current tax charge (W6)		
Tax expense: normal tax	2 313	
Deferred tax: normal tax		2 313
Deferred tax adjustment (W5)		
1/1/20X8		
Bank	150 000	
Finance lease debtors – gross investment		150 000
Finance lease instalment received		
31/12/20X8		
Finance lease debtors – unearned finance income	2 918	
Finance income		2 918
Interest income earned, (effective interest table, W2 per 31 Dec X8)		
Bank	20 000	
Finance lease debtors – gross investment		20 000
Finance lease instalment received (final instalment received in arrears)		

Solution 19.15 continued …

Journals continued …	**Debit**	**Credit**
31/12/20X8		
Tax expense: normal tax	11 000	
Current tax payable: normal tax		11 000
Current tax charge (W6)		
Deferred tax: normal tax	10 125	
Tax expense: normal tax		10 125
Deferred tax adjustment (reversal of asset) (W5)		

W1: Analysis of total amount receivable		**C**
Total future lease payments	150 000 x 3 years	450 000
Guaranteed residual value	Given	20 000
Gross investment		470 000
Cost of asset	Given	400 000
Finance income	470 000 – 400 000	70 000

W2: Finance income using effective interest rate method

Date	Instalment	Payment in lieu of: Interest	Capital	Balance
1 Jan X6				400 000
1 Jan X6	150 000	0	150 000	250 000
31 Dec X6		42 705		292 705
1 Jan X7	150 000		107 295	142 705
31 Dec X7		24 377		167 082
1 Jan X8	150 000		125 623	17 082
31 Dec X8		2 918		20 000
31 Dec X8	20 000		17 082	0
	470 000	70 000	400 000	

W3: Deferred tax on the lighting equipment		**Carrying amount**	**Tax base**	**Temporary difference**	**Deferred taxation**	
Opening balance	20X6	0	0	0	0	
Purchase		400 000	400 000			
Finance lease disposal		(400 000)	0			
Capital allowance		0	(133 333)			
Closing balance	20X6	0	266 667	266 667	80 000	A
Capital allowance		0	(133 333)			
Closing balance	20X7	0	133 334	133 334	40 000	A
Capital allowance		0	(133 334)			
Closing balance	20X8	0	0	0	0	

Solution 19.15 continued …

W4: Deferred tax on the finance lease debtor		Carrying amount	Tax base	Temporary difference	Deferred taxation	
Opening balance	20X6	0	0	0	0	
New lease		400 000	0			
Movement		(107 295)	0			
Closing balance	20X6	292 705	0	(292 705)	(87 812)	L
Movement		(125 623)	0			
Closing balance	20X7	167 082	0	(167 082)	(50 125)	L
Movement		(167 082)	0			
Closing balance	20X8	0	0	0	0	

W5: Deferred tax summary		Equipment (W3)	Finance lease Debtor (W4)	Total	
Opening balance	20X6	0	0	0	
Adjustment	20X6			(7 812)	Cr DT; Dr TE
Closing balance	20X6	80 000	(87 812)	(7 812)	L
Adjustment	20X7			(2 313)	Cr DT; Dr TE
Closing balance	20X7	40 000	(50 125)	(10 125)	L
Adjustment	20X8			10 125	Dr DT; Cr TE
Closing balance	20X8	0	0	0	

W6: Current tax summary	20X8 C	20X7 C	20X6 C	Total C
Profit before tax:				
- Finance income earned	2 918	24 377	42 705	70 000
Adjust for permanent differences	0	0	0	
	2 918	24 377	42 705	70 000
Adjust for temporary differences				
- less finance income	(2 918)	(24 377)	(42 705)	(70 000)
- add lease instalment received	170 000	150 000	150 000	470 000
- less capital allowance	(133 334)	(133 333)	(133 333)	(400 000)
Taxable income	36 666	16 667	16 667	70 000
Current normal tax at 30%	11 000	5 000	5 000	21 000

Solution 19.16

	Debit	Credit
1/1/20X5		
Selling Expense	2 000	
Bank		2 000
Initial direct costs expensed		
Finance lease debtors - Gross investment	400 000	
Finance lease debtors - Unearned finance income		153 240
Sales		246 760
Finance lease entered into as lessor (W5)		
Inventory	189 815	
Bank		189 815
Cost of manufacturing inventory		
Cost of sales	166 505	
Inventory		166 505
Cost of vehicle sold under finance lease		
31/12/20X5	70 000	
Bank		70 000
Finance Lease Debtors – Gross Investment		
Receipt of instalment		
Finance lease debtors - Unearned finance income	41 949	
Finance Income		41 949
Interest Income earned (W5)		

Solution 19.16 continued …

W1: Output VAT

246 760 (FV including VAT) x 14/114 = 30 304

W2: Cost of sales

246 760 = COS x 1.3
COS = 189 815

W3: Analysis of total amount receivable	C
Total future payments	350 000
Guaranteed residual value (N/A)	50 000
Gross investment	400 000
Sales	246 760
Finance income (Bal)	153 240

W4: Finance income (effective interest rate method)

Date	Instalment	Interest	Capital	Balance
1 Jan 20X5				246 760
31 Dec 20X5	(70 000)	41 949	28 051	218 709
31 Dec 20X6	(70 000)	37 181	32 819	185 890
31 Dec 20X7	(70 000)	31 601	38 399	147 491
31 Dec 20X8	(70 000)	25 073	44 927	102 564
31 Dec 20X9	(120 000)	17 436	102 564	-
	(400 000)	153 240	246 760	

PS: Had you not been given the fair value on transaction date, you could have worked it out as follows:

Using a financial calculator:
PMT = 70 000 FV = 50 000 n = 5 I = 17%
COMP PV = 246 760

OR

70 000 x 0.8547	= 59 829	(1 / 1.17 = 0.8547)
70 000 x 0.7305	= 51 135	(0,8547 / 1.17 = 0.7305)
70 000 x 0.6244	= 43 708	(0,7305 / 1.17 = 0.6244)
70 000 x 0.5337	= 37 359	(0,6244 / 1.17 = 0.5337)
70 000 x 0.4561	= 31 927	(0,5337 / 1.17 = 0.4561)
50 000 x 0.4561	= 22 805	
	246763 (round off to 246 760)	

Solution 19.17

Workings

W1. Factory Building

W1.1 Lease payment received

The lease payments must be averaged (smoothed) over the lease term:

Total payments (100+200+300+200)	800 000
Lease term	4 years
Lease income recognised annually	200 000

VAT of C140 000 is included in the lease but is not needed to answer the question as the lease payments are given excluding VAT.

Year	Details	Amount	Asset/ (liability)	
20X7	Received	(100 000)		
	Recognised	200 000	100 000	*(lease receivable)*
20X8	Received	(200 000)		
	Recognised	200 000	100 000	*(lease receivable)*
20X9	Received	(300 000)		
	Recognised	200 000	0	
20X10	Received	(200 000)		
	Recognised	200 000	0	

W1.2 Contingent rentals.

Operating profit was C5 000 000. Contingent rental of 1% is payable. Thus contingent rentals of C50 000 are required.

W1.3 Depreciation

The lease is an operating lease and thus still reflected in Faith Limited's books. Depreciation must be provided for:

Cost	10 000 000
Residual value	0
Depreciable amount	10 000 000
Rate of depreciation	10%
Annual depreciation	1 000 000
Years depreciated (1/1/X2 – 1/1/X7)	5 years
Accumulated depreciation	5 000 000
Carrying amount on 1/1/X7	5 000 000

W1.4 Wear and tear

Tax authority will still provide Faith Limited with a wear and tear allowance

Cost	10 000 000
Wear and tear rate	5%
Wear and tear per annum	500 000
Years provided for (1/1/X2 – 1/1/X7)	5 years
Accumulated wear and tear	2 500 000
Carrying amount	7 500 000

Solution 19.17 continued...

Workings continued …

W2 Vehicle

W2.1 Lease schedule

PV of minimum lease payments – 01/01/20X7	2 000 000
Interest	200 000
Payment	(527 595)
Closing Balance – 31/12/20X7	1 672 405
Interest	167 241
Payment	(527 595)
Closing balance – 31/12/20X8	1 312 051

W2.2 Capitalised leased asset

For your information

Fair value of the vehicle is C2 000 000. The present value of minimum lease payments is C2 000 000.

The asset is raised at the lower of these two amounts excluding VAT

Fair value = PV of MLP	2 000 000
VAT	245 614
Fair value raised at	1 754 386
Initial direct costs (costs expended by the lessee are capitalised to the leased asset	50 000
Asset raised at	1 804 386

W2.3 VAT movement

For your information;

The VAT component in the agreement is reflected in the deferred tax computation as a tax base of a liability. This liability reduces each year.

Payments made in 20X7		527 595
Total payments to be made		2 637 975
Ratio of payments made to total payments		0.2
VAT movement required	*(245614 x 0.2)*	49123

W3 Plant

W3.1 Sales revenue

Sales price	900 000
VAT	110 526
Revenue	789 474

W3.2 Cost of Sales

Cost	1 000 000
Depreciation	20%
Annual depreciation	200 000
Years depreciated (1/1/X5 – 1/1/X7)	2 years
Accumulated Depreciation	400 000
Carrying Amount (1/1/X7)	600 000

Solution 19.17 continued...

Workings continued …

W3.3 Lease Schedule

PV of MLP – 01/01/20X7	900 000
Payment	(329 003)
Interest [(900 000 – 329 003) * 10%]	57 100
Closing balance – 31/12/20X7	628 097
Payment	(329 003)
Interest	29 909
Closing Balance – 31/12/20X8	329 003

W3.4 Initial direct cost

Total initial direct costs incurred of C114 000. The VAT component is C14 000. The amount of C100 000 (excluding VAT) must be expensed (because Faith Limited is A manufacturer type lessor)

W3.5 Wear and tear

From tax authority's perspective the asset is still owned by Faith Limited and they will thus still be entitled to a wear and tear allowance

Cost	1 000 000
Wear and tear allowance	25%
Wear and tear per annum	250 000
Years provided for (1/1/X5 – 1/1/X7)	2 years
Accumulated wear and tear	500 000
Tax base on 1/1/20X7	500 000

W3.6 VAT movement

The Vat component in the agreement is reflected in the deferred tax computation as the tax base of an asset.

VAT		110 526
Payments received		329 003
Total payments to be received		987009
Ratio of payments made to total payments		33.333%
VAT movement	*(110 526 x 33.333%)*	36 842

W4 Land

The payments have to be smoothed over the lease term. Since equal payments are made each year the amount of lease expense recognised is equal to the lease payment made

There is thus no deferred tax effect.

Payment recognised = C1 000 000 annually for 10 years

Solution 19.17 continued...

Workings continued …

W5 Deferred tax Computation (for 20X7 only)

Factory Building

	Details	Carrying amount	Tax base	Temporary diff.	Deferred tax
(W1.3)/ (W1.4)	Opening balance	5 000 000	7 500 000	2 500 000	750 000 A
	Movement	(1000 000)	(500 000)	500 000	150 000
	Closing balance	4 000 000	7 000 000	3 000 000	900 000 A

Vehicle

	Details	Carrying amount		Tax base		Temp diff.	Deferred tax	
		Asset	Liability	Asset	Liability			
	Opening balance	0	0	0	0	0	0	
(W2.2)/ (W2.1)	Enter into lease	1 804 386	(2 000 000)		(245 61	(50 000)	(15 000)	
	Depreciation	(451 097)				451 097	135 329	
(W2.1)	Interest		(200 000)			200 000	60 000	
(W2.1)	Finance cost		527 595			(527 595)	(158 279)	
(W2.3)	VAT movement				49 12	49 123	14 737	
	Closing balance	1 353 289	(1 672 405)		(196 49	122 625	36 788	A

Plant

	Details	Carrying amount		Tax base		Temp diff.	Deferred tax	
		NI: Lease	Asset	NI: Lease	Asset			
(W3.2) / (W3.5)	Opening balance	0	600 000	0	500 000	(100 000)	(30 000)	L
(W3.3) / (W3.6)	Enter into lease	900 000	(600 000)	110 526		(189 474)	(56 842)	
(W3.3)	Payment	(329 003)				329 003	98 701	
(W3.3)	Interest	57 100				(57 100)	(17 130)	
(W3.6)	VAT movement			(36 842)		(36 842)	(11 053)	
(W3.5)	Wear and tear				(250 000)	(250 000)	(75 000)	
	Closing balance	628 097	0	73 684	250 000	(304 413)	(91 324)	L

Factory Building payment received

	Details	Carrying amount	Tax base	TD	DT	
	Opening balance	0	0	0	0	
(W1.1)	Movement	100 000	0	(100 000)	(30 000)	
	Closing balance	100 000	0	(100 000)	(30 000)	L

NIL – net investment in the lease

When Faith Limited enters into the lease, the asset is derecognised from the company's books and a net investment in the lease is raised (asset).

Solution 19.17 continued...

Workings continued …

W6 Current Tax computation

Profit before tax		5 000 000
Depreciation on factory building	(W1.3)	1 000 000
Wear and tear on Factory building	(W1.4)	(500 000)
Depreciation on vehicles		451 097
Finance cost on vehicles	(W2.1)	200 000
Lease payment on vehicles	(W2.1) (527 595 – 49 123)	(478 472)
Initial direct costs incurred	(W2.2)	(50 000)
Finance income on plant	(W3.3)	(57 100)
Wear and tear on plant	(W3.5)	(250 000)
Profit on sale of plant	(W3.1)/(W3.2)	(189474)
Lease payment received	(W3.3) (329 003 – 36 842)	292 161
Factory payment recognised	(W1.1)	(200 000)
Factory payment received	(W1.1)	100 000
Taxable profit		5 318 212
Current tax @ 30%		1 595 464

Disclosure

FAITH LIMITED
STATEMENT OF COMPREHENSIVE INCOME
FOR THE PERIOD ENDING 31 DECEMBER 20X7

	Notes	C 20X7
Revenue	3	XXX
Operating profit		5 200 000
Finance Costs	4	(200 000)
Profit before tax	5	5000 000
Taxation	6	(1 500 000)
Profit for the period		3 500 000
Other comprehensive income		0
Total comprehensive income		3 500 000

Solution 19.17 continued...

Disclosure continued …

FAITH LIMITED
STATEMENT OF FINANCIAL POSITION
AS AT 31 DECEMBER 20X7

	Notes	20X7 C
ASSETS		
Non-current Assets		
Plant property and equipment	7	4 000 000
Capitalised leased vehicle	8	1 353 289
Net investment in the lease	9	299 904
Current Assets		
Current portion of net investment in the lease	9	329 003
EQUITY and LIABILITIES		
Non-Current liabilities		
Leased liability	10	1 312 050
Deferred tax	11	815 464
Current Liabilities		
Current portion of leased liability	10	360 355

FAITH LIMITED
NOTES TO THE FINANCIAL STATEMENTS (EXTRACT)
FOR THE PERIOD ENDING 31 DECEMBER 20X7

		20X7 C
3. Revenue		
Revenue includes the following		
Sale of goods	(W3.1)	789 474
Finance income	(W3.3)	57 100
4. Finance Costs		
Finance costs comprises of		
Finance costs on leased vehicle	(W2.1)	200 000
5. Profit before tax		
Profit before tax includes the following (income) /expense items:		
Depreciation on factory building	(W1.3)	1 000 000
Depreciation on vehicles	(W5.1)	451 097
Operating lease expense recognised	(W4.1)	1 000 000
Initial direct costs incurred	(W3.3)	100 000
Cost of sales	(W3.4)	600 000
Operating lease income recognised:		250 000
Minimum lease payments	(W1.1)	(200 000)

Contingent rentals	(W1.2)	(50 000)

Solution 19.17 continued...

Disclosure continued …

FAITH LIMITED
NOTES TO THE FINANCIAL STATEMENTS (EXTRACT)
FOR THE PERIOD ENDING 31 DECEMBER 20X7 CONTINUED …

		20X7 C
6. Taxation		
Normal current tax		
• Current tax	*(W6)*	1 595 464
• Deferred tax	*(W5)*	(95 464)
o Factory building	*900 000 – 750 000*	(150 000)
o Vehicles	*36 788 – 0*	(36 788)
o Plant	*91 324 – 30 000*	61 324
o Factory building lease payments received	*30 000 - 0*	30 000
Tax expense per the statement of comprehensive income		1 500 000
Rate reconciliation		
Applicable tax rate		30%
Tax effect of:		
Profit before tax	*5 000 00 x 30%*	1 500 000
Tax expense per the statement of comprehensive income		1 500 000
Effective tax rate		30%

For your information
The rate recon describes why the applicable tax rate differs from the effective tax rate. This difference is caused by permanent differences. Since the permanent differences will always exist the accountant shows tax expense from tax authority point of view. They then explain why this figure is not 30% of profit before tax by disclosing a tax rate reconciliation. Because no permanent differences arose in this situation the effective tax rate and applicable tax rate are the same.

Deferred tax arises from temporary differences. These differences will disappear over a period of time. For this reason the accountant creates a book entry called deferred tax. The result of the book entry is the tax expense per the statement of comprehensive income equals to the profit before tax multiplied by the applicable tax rate (thus the tax expense is from the accountant's point of view)

As the temporary differences reverse the book entry is used so that the effective tax rate is as close as possible to the applicable tax rate.

7. Factory building

Cost	10 000 000
Accumulated depreciation	(5 000 000)
Carrying amount	5 000 000
Current year movements	
Depreciation	1 000 000
Carrying Amount	4000 000
Cost	10 000 000
Accumulated depreciation	6 000 000

Solution 19.17 continued...

Disclosure continued …

FAITH LIMITED
NOTES TO THE FINANCIAL STATEMENTS (EXTRACT)
FOR THE PERIOD ENDING 31 DECEMBER 20X7 CONTINUED …

	20X7 C
8. Capitalised leased vehicles	
Cost	0
Accumulated depreciation	0
Carrying amount	0
Current year movements	
Enter into finance lease	1 804 386
Depreciation	(451 097)
Carrying amount	1 353 289
Cost	1 804 386
Accumulated depreciation	(451 097)

9. Net investment in lease

Faith Limited leased an item of plant to Regan Limited. There are two payments of C329 003 remaining that must be paid on the 1 January each year.

The implicit rate to the lease is 10%

Current portion	329 003
Non-Current portion	299 094

Reconciliation of the gross investment in the lease to the present value of minimum lease payments

	Gross investment in lease	Unearned finance income	Net investment in lease
Due within 1 year	329 003	0	329 003
Due between 2-5 years	329 003	29 909	299 094
	658 006	29 909	628 097

10. Capitalised lease liability

Faith Limited leased a vehicle under a finance lease. Four payments of C527 595 are still required on the 31 December each year

Implicit rate to the lease is 10%

Current portion	360 355
Non-current	1 312 051

Reconciliation of the minimum lease payments to the present value

	Minimum lease payments	Finance expense	Present value
Due within one year	527 595	(47 963)	479 632
Due within 2-5 years	1 582 785	(390 012)	1 192 773
	2 110 380	(437 975)	1 672 405

Solution 19.17 continued...

Disclosure continued …

FAITH LIMITED
NOTES TO THE FINANCIAL STATEMENTS (EXTRACT)
FOR THE PERIOD ENDING 31 DECEMBER 20X7 CONTINUED …

	20X7 C
11. Deferred tax	
Deferred tax arises on the following temporary differences [asset/(liability)]	
Factory building	(900 000)
Factory building payments received	30 000
Vehicles	(36 788)
Plant	91 324
Total	(815 464)

12. Operating leases

Faith Limited leased a factory building to Olga Limited (as lessor) under a non-cancellable operating lease. In addition to the minimum lease payments contingent rentals of 1% of company's profits is required annually.

Total future minimum lease payments receivable (including VAT)	
Within 1 year	228 000
Within 2-5 years	570 000
After 5 years	0

Faith Limited leased a plot of land to Mali Limited (as lessee) under a non-cancellable operating lease. Lease payments of C1000 000 are required annually.

Total future minimum lease payments payable (including VAT)	
Within 1 year	1 140 000
Within 2-5 years	4 560 000
After 5 years	5 700 000